

**ABSTRACT**

A system is disclosed for use in a wireless communication system to provide an estimated pilot signal. The system includes a receiver and a front-end processing and despreading component in electronic communication with the receiver for despreading a CDMA signal. A pilot estimation component is in electronic communication with the front-end processing and despreading component for estimating an original pilot signal using a pilot estimator that includes more than one filter and that includes a switching method for using the more than one filter. The switching method uses a prediction error. A demodulation component is in electronic communication with the pilot estimation component and the front-end processing and despreading component for providing demodulated data symbols.